



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/009,500
Source: _____
Date Processed by STIC: 6/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



PCT10

RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

TIME: 14:28:17

Input Set : A:\merck 2332 seq list

Output Set: N:\CRF3\06062002\J009500.raw

Does Not comply
Corrected Diskette Needed

245

3 <110> APPLICANT: Merck Patent GmbH
 5 <120> TITLE OF INVENTION: Hyaluronidase from the Hirudinaria manillensis,
 6 isolation, purification and recombinant method of
 7 production
 9 <130> FILE REFERENCE: Manillase
 11 <140> CURRENT APPLICATION NUMBER: US/10/009,500
 12 <141> CURRENT FILING DATE: 2002-04-08
 14 <160> NUMBER OF SEQ ID NOS: 15
 16 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

258 <210> SEQ ID NO: 3
 259 <211> LENGTH: 488
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Leech
 263 <400> SEQUENCE: 3
 264 Lys Glu Ile Ala Val Thr Ile Asp Asp Lys Asn Val Ile Ala Ser Ala
 265 1 5 10 15
 267 Ser Gly Ser Phe Leu Gly Val Ala Phe Asp Ala Ser Leu Phe Ser Pro
 268 20 25 30
 270 Lys Gly Leu Trp Ser Phe Val Asp Ile Thr Ser Pro Lys Leu Phe Lys
 271 35 40 45
 273 Leu Leu Glu Gly Leu Ser Pro Gly Tyr Phe Arg Val Gly Gly Thr Phe
 274 50 55 60
 276 Ala Asn Trp Leu Phe Phe Asp Leu Asp Glu Asn Asn Lys Trp Lys Asp
 277 65 70 75 80
 279 Tyr Trp Ala Phe Lys Asp Lys Thr Pro Glu Thr Ala Thr Ile Thr Arg
 280 85 90 95
 282 Arg Trp Leu Phe Arg Lys Gln Asn Asn Leu Lys Lys Glu Thr Phe Asp
 283 100 105 110
 285 Asn Leu Val Lys Leu Thr Lys Gly Ser Lys Met Arg Leu Leu Phe Asp
 286 115 120 125
 288 Leu Asn Ala Glu Val Arg Thr Gly Tyr Glu Ile Gly Lys Lys Met Thr
 289 130 135 140
 291 Ser Thr Trp Asp Ser Ser Glu Ala Glu Lys Leu Phe Lys Tyr Cys Val
 292 145 150 155 160
 294 Ser Lys Gly Tyr Gly Asp Asn Ile Asp Trp Glu Leu Gly Asn Glu Pro
 295 165 170 175
 297 Asp His Thr Ser Ala His Asn Leu Thr Glu Lys Gln Val Gly Glu Asp
 298 180 185 190
 300 Phe Lys Ala Leu His Lys Val Leu Glu Lys Tyr Pro Thr Leu Asn Lys

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301 195 200 205
 E--> 303 Gly Ser Leu Val Gly Pro Asp Val Gly Trp Met Gly Val Ser Xaa Val
 304 210 215 220
 E--> 306 Lys Gly Leu Ala Asp Glu Xaa Gly Asp His Val Xaa Ala Phe Thr Leu
 307 225 230 235 240
 E--> 309 His Gln Tyr Tyr Phe Asp Gly Asn Xaa Ser Asp Val Ser Ile Tyr Leu
 310 245 250 255
 312 Asp Ala Thr Tyr Phe Lys Lys Leu Gln Leu Phe Asp Lys Val Lys
 313 260 265 270
 315 Asp Val Leu Lys Asp Ser Pro His Lys Asp Glu Pro Leu Trp Leu Gly
 316 275 280 285
 318 Glu Thr Ser Ser Gly Tyr Asn Ser Gly Thr Glu Asp Val Ser Asp Arg
 319 290 295 300
 321 Tyr Val Ser Gly Phe Leu Thr Leu Asp Lys Leu Gly Leu Ser Ala Ala
 322 305 310 315 320
 324 Asn Asn Val Lys Val Val Ile Arg Gln Thr Ile Tyr Asn Gly Tyr Tyr
 325 325 330 335
 327 Gly Leu Leu Asp Lys Asn Thr Leu Glu Pro Asn Pro Asp Tyr Trp Leu
 328 340 345 350
 330 Met His Val His Asn Ser Leu Val Gly Asn Thr Val Phe Lys Val Asp
 331 355 360 365
 333 Val Ser Asp Pro Thr Asn Lys Ala Arg Val Tyr Ala Gln Cys Thr Lys
 334 370 375 380
 336 Thr Asn Ser Lys His Thr Gln Ser Arg Tyr Tyr Lys Gly Ser Leu Thr
 337 385 390 395 400
 339 Ile Phe Ala Leu Asn Val Gly Asp Gly Asp Val Thr Leu Lys Ile Gly
 340 405 410 415
 342 Gln Tyr Ser Gly Lys Lys Ile Tyr Ser Tyr Ile Leu Thr Pro Glu Gly
 343 420 425 430
 345 Gly Gln Leu Thr Ser Gln Lys Val Leu Leu Asn Gly Lys Glu Leu Asn
 346 435 440 445
 348 Leu Val Ser Asp Gln Leu Pro Glu Leu Asn Ala Asp Glu Ser Lys Thr
 349 450 455 460
 351 Ser Phe Thr Leu Ser Pro Lys Thr Phe Gly Phe Phe Val Val Ser Asp
 352 465 470 475 480
 354 Ala Asn Val Glu Ala Cys Lys Lys
 355 485
 498 <210> SEQ ID NO: 5
 499 <211> LENGTH: 488
 500 <212> TYPE: PRT
 501 <213> ORGANISM: Leech
 503 <400> SEQUENCE: 5
 504 Lys Glu Ile Ala Val Thr Ile Asp Asp Lys Asn Val Ile Ala Ser Ala
 505 1 5 10 15
 507 Ser Glu Ser Phe His Gly Val Ala Phe Asp Ala Ser Leu Phe Ser Pro
 508 20 25 30
 510 Lys Gly Leu Trp Ser Phe Val Asp Ile Thr Ser Pro Lys Leu Phe Lys
 511 35 40 45
 513 Leu Leu Glu Gly Leu Ser Pro Gly Tyr Phe Arg Val Gly Gly Thr Phe

see p. 5
 for explanation
 of Xaa

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514	50	55	60
516	Ala Asn Arg Leu Phe Phe	Asp Leu Asp Glu Asn Asn	Lys Trp Lys Asp
517	65	70	75
519	Tyr Trp Ala Phe Lys Asp	Lys Thr Pro Glu Thr Ala Thr	Ile Thr Arg
520	85	90	95
522	Arg Trp Leu Phe Arg Lys	Gln Asn Asn Leu Lys Lys	Glu Thr Phe Asp
523	100	105	110
525	Asn Leu Val Lys Leu Thr	Lys Gly Ser Lys Met Arg	Leu Leu Phe Asp
526	115	120	125
528	Leu Asn Ala Glu Val Arg	Thr Gly Tyr Glu Ile Gly	Lys Lys Met Thr
529	130	135	140
531	Ser Thr Trp Asp Ser Ser	Glu Ala Glu Lys Leu Phe	Lys Tyr Cys Val
532	145	150	155
534	Ser Lys Gly Tyr Gly Asp	Asn Ile Asp Trp Glu Leu	Gly Asn Gly Pro
535	165	170	175
537	Asp His Thr Ser Ala His	Asn Leu Thr Glu Lys Gln	Val Gly Glu Asp
538	180	185	190
540	Phe Lys Ala Leu His Lys	Val Leu Glu Lys Tyr Pro	Thr Leu Asn Lys
541	195	200	205
543	Gly Ser Leu Val Gly Pro	Asp Val Gly Trp Met Gly	Val Ser Tyr Val
544	210	215	220
546	Lys Gly Leu Ala Asp Glu	Ala Gly Asp His Val Thr	Ala Phe Thr Leu
547	225	230	235
549	His Gln Tyr Tyr Phe Asp	Gly Asn Thr Ser Asp Val	Ser Ile Tyr Leu
550	245	250	255
552	Asp Ala Thr Tyr Phe Lys	Lys Leu Gln Gln Leu Phe	Asp Lys Val Lys
553	260	265	270
555	Asp Val Leu Lys Asp Ser	Pro His Lys Asp Lys Pro	Leu Trp Leu Gly
556	275	280	285
558	Glu Thr Ser Ser Gly Tyr	Asn Ser Gly Thr Glu Asp	Val Ser Asp Arg
559	290	295	300
561	Tyr Val Ser Gly Phe Leu	Thr Leu Asp Lys Leu Gly	Leu Ser Ala Ala
562	305	310	315
564	Asn Asn Val Lys Val Val	Ile Arg Gln Thr Ile Tyr	Ser Gly Tyr Tyr
565	325	330	335
567	Gly Pro Leu Asp Lys Asn	Thr Leu Glu Pro Asn Pro	Asp Tyr Trp Leu
568	340	345	350
570	Met His Val His Asn Ser	Leu Val Gly Asn Thr Val	Phe Lys Val Asp
571	355	360	365
573	Val Ser Asp Pro Thr Asn	Lys Ala Arg Val Tyr Ala	Gln Cys Thr Lys
574	370	375	380
576	Thr Asn Ser Lys His Thr	Gln Ser Arg Tyr Tyr Lys	Gly Ser Leu Thr
577	385	390	395
579	Ile Phe Ala Leu Asn Val	Gly Asp Glu Asp Val Thr	Leu Lys Ile Gly
580	405	410	415
582	Gln Tyr Ser Gly Lys Lys	Ile Tyr Ser Tyr Ile Leu	Thr Pro Glu Gly
583	420	425	430
585	Gly Gln Leu Thr Ser Gln	Lys Val Leu Leu Asn Gly	Lys Glu Leu Asn
586	435	440	445

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E--> 588 Leu Xaa Ser Asp Gln Leu Pro Gln Leu Asn Ala Asp Glu Ser Lys Thr
589 450 455 460
591 Ser Phe Thr Leu Ser Pro Lys Thr Phe Gly Phe Phe Val Val Ser Asp
592 465 470 475 480
594 Ala Asn Val Glu Ala Cys Lys Lys
595 485

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VARIABLE LOCATION SUMMARY

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

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Input Set : A:\merck 2332 seq list

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Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:2; Xaa Pos. 223,231,236,249

Seq#:3; Xaa Pos. 223,231,236,249

Seq#:4; Xaa Pos. 450

Seq#:5; Xaa Pos. 450

VERIFICATION SUMMARY

DATE: 06/06/2002

PATENT APPLICATION: US/10/009,500

TIME: 14:28:18

Input Set : A:\merck 2332 seq list

Output Set: N:\CRF3\06062002\J009500.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:672
L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:720
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:768
L:303 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3
M:340 Repeated in SeqNo=3
L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1392
L:588 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:5